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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,333	06/01/2001	Jose Iborra	CHG-001.3P	3961

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EXAMINER
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RAMPURIA, SATISH

ART UNIT	PAPER NUMBER
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2191

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/872,333	Applicant(s) IBORRA ET AL.	
	Examiner Satish S. Rampuria	Art Unit 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. This action is in response to the application filed on 05/31/2005.
2. Claims added by the Applicant: 4-39
3. Claims 1-39 are pending.
4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/15/2005 has been entered.

***Information Disclosure Statement***

5. Applicants are reminded to file the form 1449 with the correct Application Number. Examiner's consideration of IDS will be forthcoming upon filing the correct IDS.

***Claim Objections***

6. Claim 1-39 are objected to because of the following:
  - Several words are found such as can, may, make sense, essential, filters etc.
  - The word "formal language specification" is not consistent with its terminology such as this word is in capitol (Formal Language Specification) in some claim and small (formal language specification) in the other claims.

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For claims 24, 34 and 39 the “he or she” appears to be a typo to be consistent with the other claims it should have been “user”.

For claim 13 and 14 the claim status should be only [new] instead of referring to the specification.

For claim 26 and 33, delete step “b)” and add step B)”.

For claims 38 and 39 the claim status is no given, it should be [new].

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Clarification and/or correction are required.

Regarding, claim 1, line 21, the limitation, “this user’s privilege level” is unclear as to what user and what privilege level will be determined.

Regarding, claim 1, line 35, the limitation, “necessary arguments” is unclear as to what necessary arguments included in the message.

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Regarding, claim 1, line 47, the limitation, "take action" is unclear as to what action is taken if constraints are not satisfied.

Regarding, claim 1, line 51, the limitation, "carry out appropriate action" is unclear as to what appropriate action is done if trigger event has occurred.

Claims 2, 3, 4, 7, 10 and 13 have the similar limitations to those in claim 1 with respect to "this user's privilege level", "necessary arguments", "take action", "carry out appropriate action", as recited.

The rejection of the base claim is necessarily incorporated into the dependent claims.

9. Claims 29, 30, 31, 37 and 38 recites the limitation "perform step B". There is insufficient antecedent basis for this limitation in the claim.

The rejection of the base claim is necessarily incorporated into the dependent claims.

### ***Claim Rejections - 35 USC § 101***

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 3, 7 and 33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 3, 7 and 33 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 15 to 16, lines 5-32 and 1-26, the medium is not limited to tangible

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embodiments, instead being defined as including both tangible embodiments (e.g., computer readable medium) and intangible embodiments (e.g., transmission media, radio frequency (RF), infrared (IR), a carrier wave, telephone line, a signal, etc.). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media. For the specification at the bottom, carrier medium and transmission media would be not statutory but storage media would be statutory.

The rejection of the base claim is necessarily incorporated into the dependent claims.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5481718 to Ryu et al. (hereinafter, Ryu).

**Per claims 1, 10, 13, 14, 18-25, and 30-32:**

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Ryu discloses:

validating a formal language specification written in a formal language which has predetermined rules of syntax and semantics, said formal language specification defining a computer program to be automatically written;

(col. 10, lines 42-51. Also, see FIG. 10 and related discussion)

~~for automatically translating each element of a~~ formal language specification defining an object model, a functional model, a dynamic model and a presentation model, which taken together define the requirements of the program to be automatically written, ~~written in a formal language defining a full and complete computer program to be automatically written by a computer into a full and complete source code computer program which that can be compiled into a complete, executable program which can execute by itself on a computer and needs no additional third party source code or source code from existing components or code libraries to be compiled with it to make said computer program complete executable program and which implements the requirements of said formal language specification, said formal language specification defining at least an identification function for every class, and at least a valuation for every variable attribute classes of objects having attributes, services and relationships with other classes, said translating step comprising the following steps:~~

(col. 7 to 8, lines 62-67 to 1-5. Also, see FIG. 7 and related discussion)

using a computer, automatically write computer code that will request user name and password, receive any responses and authenticate the user;

(col. 38 to 39, lines 55-67 to 1-31. Also, see FIG. 46 and related discussion)

using a computer, automatically write computer code that will determine this user's privilege level and query said formal language specification and determine all object attributes said this user has privilege to see and query and all services said this user can invoke;

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(col. 38 to 39, lines 55-67 to 1-31. Also, see FIG. 46 and related discussion)

using a computer, automatically write computer code which queries said formal language specification for all services of all classes that any authorized user may invoke and identifies an object server which will implement each said service;

(col. 38 to 39, lines 55-67 to 1-31. Also, see FIG. 46 and related discussion)

using a computer, automatically write code that will retrieve service arguments for all services ~~from one or more of a user, an object server, and another process, as appropriate;~~

(col. 38 to 39, lines 55-67 to 1-31. Also, see FIG. 46 and related discussion)

using a computer, automatically write code that controls a computer to display means by which and entity can invoke a service, and which receives input to invoke a particular service and responds by sending a message to the appropriate object server to invoke the service, said message including the necessary arguments for the service to execute;

(col. 31, lines 47-67. Also, see FIG. 37 and related discussion)



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using a computer, automatically write code that implements an object server for every service, each of which first checks to verify that state transitions are valid and make sense for the current state of objects of which the object server ~~service~~ will be altering the state;

(col. 31, lines 47-67. Also, see FIG. 37 and related discussion)

using a computer, automatically write code for every object server that verifies preconditions are satisfied before making state transitions of any objects the states of which are acted upon by the object server;

(col. 19, lines 55-67. Also, see FIG. 21 B and related discussion)

using a computer, automatically write code to make all valuation calculations required by said formal language specification of each object server;

(col. 19, lines 55-67. Also, see FIG. 21 B and related discussion)

using a computer, automatically write code to verify that integrity constraints specified in said formal language specification on the values of attributes of objects have been satisfied after execution of a service and take action if said integrity constraints are not satisfied; and

(col. 9-10. Also, see FIG. 10 and related discussion)

using a computer, automatically write code for every object server to test trigger relationships specified in said formal language specification after execution of a service and carry out appropriate action if a trigger event has occurred.

(col. 9-10. Also, see FIG. 10 and related discussion)

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*Claims 2 and 4* are the apparatus claim corresponding to process claim 1, and rejected under the same rational set forth in connection with the rejection of claim 1, above.

*Claims 3 and 7* are the computer product claim corresponding to process claim 1, and rejected under the same rational set forth in connection with the rejection of claim 1, above.

*Claim 26* is the apparatus claim corresponding to process claim 14, and rejected under the same rational set forth in connection with the rejection of claim 14, above.

**Per claims 5, 8 and 11:**

The rejection of claim 4 is incorporated, and further, Ryu discloses:

presenting graphical user interface tools which can be invoked by a user to define primitives of said Formal Language Specification which detail an object model, a dynamic model including a state transition diagram for every class and an object interaction diagram for every trigger and for every global transaction, a functional model defining the dynamic formulas of said evaluations which define the effect of events on variable of attributes defined for objects of said object model, and a presentation model which defines the desired user interface of said desired computer program.

(col. 11, lines 39-67. Also, see FIG. 11 and 15 and related discussion)

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**Per claims 6, 9, 12, 15-17 and 27-29:**

The rejection of claim 4 is incorporated, and further, Ryu discloses:

displaying a CASE tool with graphical user interface tools which can be invoked by a user to define primitives of said Formal Language Specification which detail an object model, a dynamic model including a state transition diagram for every class and an object interaction diagram for every trigger and for every global transaction, a functional model defining the dynamic formulas of said evaluations which define the effect of events on variable attributes of attributes defined for objects of said object model, and a presentation model which defines the desired user interface of said desired computer program, said CASE tool automatically converting said primitives to a formal language specification written in a formal language with predefined rules of syntax and semantics; and

(col. 11, lines 39-67. Also, see FIG. 11 and 15 and related discussion)

validating said formal language specification to make sure it is complete in that there is no missing information and all required properties of said Conceptual Model are defined and have a value, and correct in that information introduced in said Conceptual Model is syntactically and semantically consistent and not ambiguous.

(col. 5, lines 25-30 and col. 11, lines 8-18. Also, see FIG. 11 and 15 and related discussion)

**Claims 33-39** are the computer product claim corresponding to process claims 14, 15, 16, 24, 22, 20, and 24 respectively, and rejected under the same rationale set forth in connection with the rejection of claims 14, 15, 16, 24, 22, 20, and 24 respectively, above.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Respectfully, Applicants reminded to correct the pointed out minor informalities in claims 1-39.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Satish S. Rampuria** whose telephone number is **(571) 272-3732**. The examiner can normally be reached on **8:30 am to 5:00 pm** Monday to Friday except every other Friday and federal holidays. Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: 571-272-2100**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Tuan Q. Dam** can be reached on **(571) 272-3695**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria  
Patent Examiner  
Art Unit 2191  
7/11/2005

  
**ANIL KHATRI**  
PRIMARY EXAMINER